

KORYAKIN, V.I.; SOKOLOVA, A.I.; Primali uchastiye; VODOLAZOV, P.N;  
Zabolotskiy, M.V.; ZAKHAROVA, A.V.; KLINSKIKH, Ye.V.

Dry distillation of wood as a potential source of furfural.  
Gidroliz.i lesokhim.prom. 13 no.5:3-6 '60. (MIRA 13:7)

1. TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskoy institut.  
(Furaldehyde) (Wood distillation)

S/081/62/000/005/017/112  
B150/B110

AUTHORS: Sokolova, A. I., Khranova, V. V.

TITLE: Some results of biogeochemical investigations

PERIODICAL: Referativnyi zhurnal. Khimiya, no. 5, 1962, 113, abstract  
509 (Tr. Sverd. gosn. in-ta., no. 40, 1961, 107 - 115)

TEXT: Results are presented of a radiometrical and biogeochemical study of U ore development, age-correlated with the lower Permian tuff lavas of liparite porphyries. The technique used in the work is described. No correlation of abnormally high concentrations of U and Ra has been established with any definite type of plant. Variations in the U contents of plants are determined to a considerable extent by the thickness of the loose rocks. Compared with U and Ra in plants, the coefficient of concentration of U in mineralized regions is 50,000 and of Ra 100 - 500 clarke units. Compared with the local biochemical background, the accumulation of U is 20 - 30. In these regions misshapen plant forms and growth stunting are observed. [Abstracter's note: Complete translation.]

Card 1/1

*Sokolova, A.I.*

USSR/Microbiology - General Microbiology

F-1

Abs Jour : Referat Zhurn - Biol. No 16, 25 Aug 1957, 63401

Author : Sokolova, A.I., Rautenshtein, Ya.I.

Title : Comparative Study of the Activity of Catalase and some  
Other Biochemical Indicators in Phagoresistant and  
Phagosensitive Forms of Actinomycetes.

Orig Pub : Mikrobiologiya, 1956, 25, No 4, 466-470.

Abstract : The comparative study of catalase activity in spores and  
mycelia of phagosensitive culture (PhS) (Russian letters  
FCh) Actinomyces gloosporus streptomycini and in the va-  
riant experimentally obtained from this culture, resis-  
tant to 3 types of actinophage (PhR) (Russian letters FU),  
it was shown that a greater activity of the catalase is  
noted in spores and young mycelium of the PhR form. The  
spore of PhR culture also contain more of the soluble  
form of catalase than do the PhS. Fixation of mycelium  
of the actinomycetes by alcohol brings on a significant

Card 1/2

*Incl. Microbiology 12 - AS USSR*

USSR/Microbiology - General Microbiology

F-1

Abs Jour : Referat Zhurn - Biol. No 16, 25 Aug 1957, 68401

lowering of catalase activity in PhS and PhR cultures.  
The catalase inhibitor sodium nitrate similarly depresses the action of this enzyme in PhR and PhS cultures.  
DNK in mycelium of 24 hour growth of PhR cultures is more resistant to action of oxygen than in PhS.

Card 2/2

- 13 -

*SOKOLOVA, A.I.*

KRASIL'NIKOV, N.A.; BELOZERSKIY, A.N.; RAUTENSHTEYN, Ya.I.; KORENYAKO, A.I.;  
NIKITINA, N.I.; SOKOLOVA, A.I.; URYSON, S.O.

The antibiotic grisein (grisemin) and its producers [with summary  
in English]. Mikrobiologiya 26 no.4:418-425 J1-Ag '57. (MIRA 10:12)

1. Institut mikrobiologii AN SSSR i Institut biokhimii im. A.N.Bakha  
AN SSSR, Moskva.

(ANTIBIOTICS,

grisemin, prod. organisms (Rus))

KORENYAKO, A.I.; KRASIL'NIKOV, N.A.; NIKITINA, N.I.; SOKOLOVA, A.I.

Actinomycetes of the fluorescent group. Trudy Inst. microbiol.  
no.8:133-159 '60. (MIRA 14:1)

1. Institut mikrobiologii AN SSSR.  
(ACTINOMYCETALES)

KRASIL'NIKOV, N.A.; KORENYAKO, A.I.; SOKOLOVA, A.I.; NIKITINA, N.I.;  
KIRILLOVA, N.F.

Interspecific antagonism as a species characteristic. Mikro-  
biologiya 32 no.13-12 '63 (MikA 17:3)

1. Institut mikrobiologii AN SSSR.

VASIL'YEVA, M.G.; SOKOLOVA, A.L.

Determination of boron in technical boron. Zhur.anal.khim. 17  
no.4:530-531 J1 '62. (MIRA 15:8)

1. Physico-Technical Institute, Academy of Sciences of the  
Georgian S.S.R., Sukhumi. (Boron—Analysis)



KOT, Yu.D.; SOKOLOVA, A.L.

Evaporation and crystallization of massecuite from the second boiling product. Sakh.prom. 36 no.11:7-11 N '62. (MIRA 17:2)

1. TSentral'nyy nauchno-issledovatel'skiy institut sakharney promyshlennosti.

NERONOV, V.M.; SOKOLOVA, A.L.

Use of fur procurement data for mapping the quantitative distribution of game animals on the territory of the Soviet Union. Biul. MOIP. Otd. biol. 63 no.2:5-17 ~~Mr-Ap~~ '63. (MIRA 17:2)

VASIL'YEVA, M.G.; LALYKINA, V.M.; MAKHARASHVILI, N.A.; ~~SOKOLOVA,~~  
~~A.L.~~; SOYFER, V.M.; TSKIRIYA, N.G.; BARON, Ye.Ye.,  
doktor khim. nauk, red.

[Analysis of boron and its inorganic compounds] Analiz bora  
i ego neorganicheskikh soedinenii. Pod red. E.E. Baroni.  
Moskva, Atomizdat, 1965. 267 p. (MIRA 19:1)

Y. R. F., 1965; SOKOLOVA, A.L.

Formation of main fraction minerals in the Upper Eocene ash  
tuffs of the Balkhan Range region in southwestern Turkmenia.  
Lit. i pol. iskop. no.6:34-53 M-D '65.

(MIRA 18.12)

1. Geologicheskii institut AN SSSR, Moskva. Submitted January 13,  
1965.

... .., L. M.

... .., L. M. "Obtaining high-grade carrot and beet garden seed," Doklady (Mosk. s.-kh. akad.in. Timiryazeva), Issue 9, 1949, p. 94-95

... : U-5240, 17, Dec. 53, (Istoria Zhurnal 'nykh Statey, No. 25, 1949..

Country : USSR M-5  
 CATEGORY :  
 ABS. JOUR. : RZBiol., No. /9 1958, No. 87077  
 AUTHOR : Sokolova, A. M.  
 INST. : Moscow Agricultural Academy Imeni K. A. \*  
 TITLE : Effect of Spray-Feeding on Growth and Development of Seed Plants and Roots of Carrots and Beets.  
 ORIG. PUB. : Dokl. Mosk. s.-kh. akad. im. K.A.Timiryazeva, 1957, No 31, 38-42  
 ABSTRACT : Spraying of seed plants of carrots with boric acid (in concentrations of 0.006 and 0.012%) accelerated their maturation by 4-8 days, increased yield of seeds per single plant, had an effect on subsequent yields of roots obtained from these seeds, and eliminated completely phoma disease of seed plants and roots of the carrots. Spray feeding of seed plants of beets with B at concentration of 0.2%, P -- 0.5% and Mn -- 0.2%, improved seedage quality of seeds and increased their yield. Soaking of seeds of carrots and beets, for 12 hours, in 0.1% solution of boric acid and 0.2% solution of manganese sulfate, increased yield of roots. -- Ye. M. Tsvetayeva.

CARD://

~~SOLOVYOV, A. M.~~

Effect of certain meteorological factors in hypertension. Terap.  
(MLRA 8:2)  
arkh. 26 no.5:25-29 S-0 '54.

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. prof. S.V. Shestakov) Astrakhanskogo meditsinskogo instituta i terapevticheskogo otdeleniya basseynovoy bol'nitsy (glavnyy vrach N.V. Shubina) Nizhne-Volzhskogo zdavotdela.

(HYPERTENSION, physiology,  
meteorol. aspects)

(CLIMATE,  
meteorol. aspects in hypertension)

SOLOLOVA, A. M.

112-1-1056

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957,  
Nr 1, p.167 (USSR)

AUTHOR: Sinadskiy, S.Ye., Sokolova, A.M.

TITLE: Automatic welding of sleeves (Avtomaticheskaya privarka  
shtutserov)

PERIODICAL: Sbornik: Vopr. svarki v energomashinostroyeni 1  
metallurg.proiz-ve, Moscow, Mashgiz, 1955, pp.100-119

ABSTRACT: Automatic welding under flux produces a welded seam of  
high quality: deep penetration, uniformity and durability.  
This permitted replacing the multilayer seam with a single-  
layer or double-layer with smaller legs, but with the same  
rated height and same or higher durability. Automatic  
welding requires high precision in producing and assembling  
the sleeves because in this way, correct disposition of  
the seam is provided. Welding apparatus AOIII-2, AOIII-4 of  
LHWTMIII construction are each designed for welding on  
sleeves of only one size. The machined surface of the free

Card 1/2



SOKOLOVA, A M

AID P - 5204

Subject : USSR/Engineering

Card 1/1 Pub. 107-a - 3/13

Authors : Novozhilov, N. M., Kand. of Tech. Sci. and A. M. Sokolova,  
Eng.

Title : Welding with electric rivets in the atmosphere of carbon  
dioxide.

Periodical : Svar. proizv., 7, 10-13, J1 1956

Abstract : The authors describe their experimental work in welding  
with electric rivets - melting electrodes in the carbon  
dioxide atmosphere - and assert that this method has  
advantages over the welding with electric rivets under  
fluxes which is widely used in the industry. Five tables,  
7 photos, 2 drawings; 4 Russian references (1953-55).

Institution : Central Scientific Research Institute of Machine-Building  
Technology (TsNIITMASH), with which both authors are  
affiliated.

Submitted : No date

BRINBERG, I.L., kandidat tekhnicheskikh nauk; SOKOLOVA, A.M., inzhener.

Organizing centralized machinery production for mechanization  
and automatization of arc welding. Vest. mash. 36 no.6:68-71  
Je '56. (MLRA 9:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut tyazhelogo  
mashinostroyeniya. (Electric welding)

135-58-7-3/20

AUTHOR: Novozhilov, N.M., Candidate of Technical Sciences, and  
Sokolova, A.M., Engineer

TITLE: Development of Electrode Rods for Welding Low-Carbon and Low-  
Alloy Steels in Carbon Dioxide (Razrabotka elektrodnykh pro-  
volok dlya svarki malouglerodistykh i nizkolegirovannykh staley  
v uglekislom gaze)

PERIODICAL: Svarochnoye proizvodstvo, 1958, Nr 7, pp 10-14 (USSR)

ABSTRACT: Three kinds of electrodes and their welding properties were  
investigated by TsNIITMASH and the following conclusions are  
made: Electrodes containing aluminum and titanium have no ad-  
vantages over silico-manganese rods, as aluminum and titanium  
in "critical" concentrations are able to deteriorate the  
quality of welds. Satisfactory results in welding low-carbon  
steels in carbon dioxide can be obtained by using electrode  
rods containing silicon and manganese in the following pro-  
portions: 0.05-0.12 % C, 0.6-1.0 % Si and 1.4-2.4 % Mn. This  
composition can be used for welding various low-alloy steels  
in carbon dioxide. The addition of alloying elements such as  
Cr, Ni, Mo, Cu, etc., having a feeble affinity with oxygen,  
provides various weld properties. On the basis of these re-

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135-58-7-3/20

Development of Electrode Rods for Welding Low-Carbon and Low-Alloy Steels  
in Carbon Dioxide

sults, obtained by experiments, TsNIITMASH developed the  
"Sv-08GSA" and "Sv-08G2SA" electrode rods, ensuring good weld  
qualities and diminished tendency toward pore and crack  
formation.

There are 9 tables, 1 diagram, 2 graphs, 2 photos, 9 Soviet  
and 4 English references.

ASSOCIATION: TsNIITMASH

1. Welding electrodes—Development    2. Steel—Welding

Card 2/2

NOVOZHILOV, Nikolay Mikhaylovich; SOKOLOVA, Aleksandra Mikhaylovna;  
RAGAZINA, M.F., inzh., ved. red.; SHTERLING, S.Z., dots., red.;  
SOROKINA, T.M., tekhn. red.

[Automatic and semiautomatic welding procedures for low-carbon  
and low-alloy steels using a consumable electrode in an atmosphere  
of carbon dioxide] Tekhnologiya avtomaticheskoi i poluavtomaticheskoi  
svarki malouglerodistykh i nizkolegirovannykh stalei plavias-  
hchimsia elektrodom v srede uglekislogo gaza. Moskva, Filial  
Vses. in-ta nauchn. i tekhn. informatsii, 1958. 18 p. (Peredovoi  
nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 12.  
No.M-58-50/5) (MIRA 16:3)

(Electric welding)

SOV/135-59-5-3,21

25(1)

AUTHOR: Novozhilov, N. M., Candidate of Technical Sciences; Sokolova,  
A. M., Engineer

TITLE: An Examination of the Properties of the Metal of Welding  
Seams Made in Carbon Dioxide by Sv-08GSA and Sv-08G2SA Wires

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 5, pp 7-12 (USSR)

ABSTRACT: In 1956, TsNIITMASH developed the Sv-08GSA and Sv-08G2SA electrode wires for welding steel in CO<sub>2</sub>. In comparison with the Sv-10GS and Sv-08GS wires previously used, the new electrode wires contain an increased amount of manganese and less aluminum. In the work described in this article, the properties of welded joints made with these wires (produced by TU-2-57 Mosgorsovnarkhoz) on a series of carbon and low-alloy steels is examined. The welding was carried out with electrode wires 2 mm in diameter and having a gas consumption of 1200 litres per hour. Nutritive carbon dioxide, specified in GOST 8050-56, was used. As a result of these investigations the following conclusions were drawn: 1) the electrode wires can be used for welding carbon and several low-alloy construction

Card 1/2

SOV/135-59-5-3/21

An Examination of the Properties of the Metal of Welding Seams Made in  
Carbon Dioxide by Sv-08GSA and Sv-08G2SA Wires

steels in CO<sub>2</sub>; 2) the metal of the welded seam combines strength, ductility and high resilience at room and low temperatures and after mechanical aging; 3) the quality of non-metallic impurities contained in seams made with these wires was less than in seams made under flux by high-quality electrodes and in CO<sub>2</sub> with powder wire. It can be further minimized by reducing the amount of aluminum in the electrode wire. There are 10 tables, 3 photos, 2 graphs and 8 references, 6 of which are Soviet and 2 British.

ASSOCIATION: TsNIITMASH

Card 2/2

85444

S:135/60:000, 012/006:010  
A006/A001

1.5400 also 2708

AUTHORS: Brinberg, I.L., Candidate of Technical Sciences Sokolova, A.M.  
Engineer

TITLE: Welding in Carbon Dioxide

PERIODICAL: Svarochnoye proizvodstvo, 1960, No. 12 pp. 23-26

TEXT: The authors report on a series of semi-automatic and automatic machines for welding in CO<sub>2</sub>, shown in a special exhibition. The ПГШ-3 (PGSh-3) semi-automatic machine for welding in CO<sub>2</sub> operates with a wire of 1.6-2 mm in diameter, on 250-500 amp current, in lower and inclined position; its efficiency is up to 50 kg weld metal per shift. The ПШ-5 (PSh-5) semi-automatic machine was modified by replacing the holders by gas-electric burners and by introducing a carbon dioxide feed system; the machine operates with 1.6-2 mm-diameter-wire on 250-500 amp current. The А-547р (A-547r) semi-automatic machine operating with 0.6-1.2 mm-diameter-wire and 20-200 amp current can be used for welding in CO<sub>2</sub> of thin metals in all spatial positions. Its application in shipbuilding is demonstrated on a ship model. The П-130 (P-130) automatic machine for welding with a 0.8-1 mm-diameter-wire 0.5-2 mm thick metal is fed from a BC-130/20

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85439

S/135/60/000/012/006/010  
AC06/AC01

# Welding in Carbon Dioxide

013 130/20) selenium rectifier it is employed for the repair of automobile parts. The ПДПГ-300 (PDEP-300) semi-automatic machine (Figure 4) operates with 0.8-2 mm diameter wire on 60 to 500 amp current. Welding can be performed in all spatial positions and can be effectively used for welding up cast defects. The АДПГ-500 (ADEP-500) automatic machine (Figure 5) is intended for arc welding of steel in CO<sub>2</sub> with a wire of 0.8-2.5 mm in diameter and 60 to 500 amp current. angular and butt welds in the lower position can be produced. The АДК-500-3 (ADK-500-3) automatic machine (Figure 6) is used for welding in shielding gases or under flux circular seams of 75 to 300 mm in diameter, in horizontal or inclined position of the table. Welding is performed with wire of 1.6-2.5 mm in diameter or up to 500 amp current. The Р-912 (R-912) stand is used to produce circular seams of 6 to 200 mm in diameter with a vertical rotation axis. Automatic welding in CO<sub>2</sub> is made with a wire of 0.5-1.2 mm in diameter on 40 to 200 amp current. The stand is employed in large-scale production for welding on oil funnel bases, and lids of electric contacts to compressor bottoms. The Р-964 (R-964) welding machine (Figure 7) is used to produce automatically circular seams on parts of up to 300 mm in diameter with a horizontal rotation axis, with a wire of 0.5-1.2 mm in diameter. The machine is equipped with two welding heads making possible to produce simultaneously two seams. The unit is employed to weld

Card 2/7

85159

S/135/60/000/012/006/010  
AC06/A001

# Welding in Carbon Dioxide

automobile Cardan shafts. The F-899 (R-899) stand is intended for the automatic assembly and welding in CO<sub>2</sub> of thin-walled steel spheres of 200 mm in diameter, with 0.8-1.2 mm diameter wire on 70-150 amp current. The efficiency of the stand is 25-30 items per hour. The multi-purpose C-55 (S-55) unit (Figure 8) is used to produce circular seams on tubular work with a horizontal and vertical rotation axis. Seams of 20 to 100 mm in diameter can be welded on 200-300 mm long pipes (on roller supports) of up to 300 mm in diameter in a horizontal plane. Wire of 0.8 to 1.2 mm in diameter is used. The multi-purpose USA-2 (USA-2) apparatus (Figure 9) is intended for automatic, semi-automatic and electric-rivet welding in shielding gas or under flux. A wire of 0.8 to 3 mm in diameter and 100-600 amp current is used. The unit includes an electric-riveting head with automatic electrode wire feed and precision measuring out of welding time, performed by an electronic time relay. The described processes can be performed with the use of a number of wires developed for this purpose including the C-08FC (Sv-08GS), C-08F2C (Sv-08G2S), C-10X12C (Sv-10KhG2S), C-08X3F2CM (Sv-08Kh3G2SM), C-08X12CM (Sv-08KhG2SM), C-08X12CM2 (Sv-08KhG2SMF), C-08X14F1 (Sv-08Kh14GT) and C-10/17T (Sv-10Kh17T) wires. These wires are employed for welding carbon and alloyed steels in CO<sub>2</sub> and have been included into GOST 2246-60. A method is demonstrated of obtaining CO<sub>2</sub> from dry ice by evaporation in gasifiers. The

Card 3/7

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S/135/60/000/012/006/010  
A006/A001

### Welding in Carbon Dioxide

The CO<sub>2</sub> thus obtained has high purity and a low water vapor content. The use of the described methods of welding in CO<sub>2</sub> is demonstrated on a series of welded articles, such as steam turbine diaphragms, and other turbine parts, automobile parts, ship and agricultural machine components, boilers and oil containers, blast furnace parts and pipelines. The method ensures a raised labor efficiency and savings amounting to 50 to 90,000 rubles yearly per one automatic machine and to 25-35,000 rubler per one semi-automatic unit.



Figure 4.

The PDPG-300 semi-automatic machine.

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Welding in Carbon Dioxide

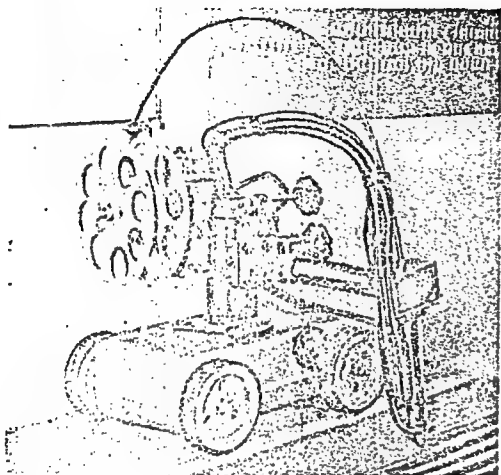


Figure 5.

The ADPG-500 automatic machine  
Card 5/7

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ACC6/A001

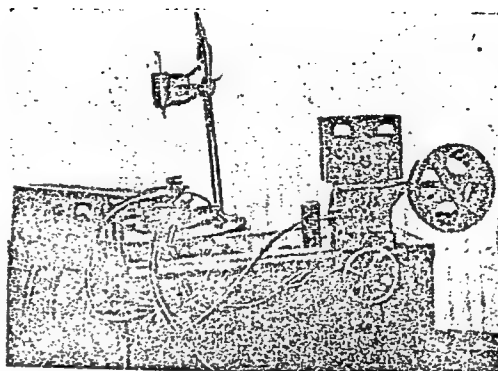


Figure 6.

The ADK-500-3 automatic machine

Welding in Carbon Dioxide

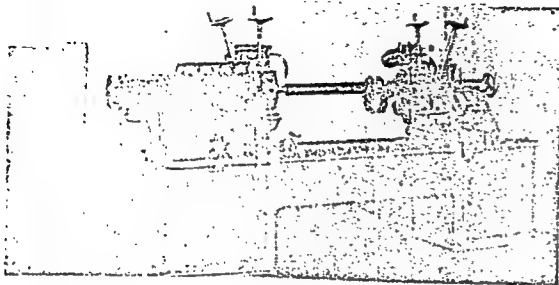


Figure 7.

The R-964 welding automation

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A006/A001

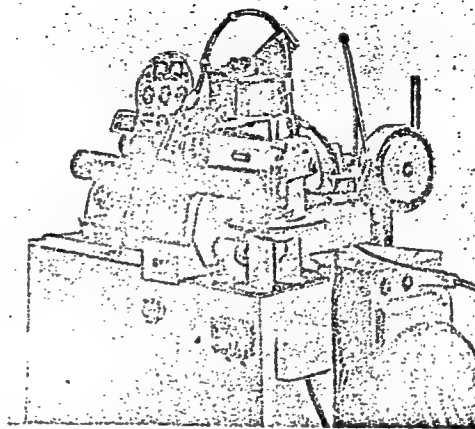


Figure 8.

The S-55 multi-purpose unit

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Welding in Carbon Dioxide

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Figure 9.

The multi-purpose USA-2 welding apparatus

There are 11 figures.

Card 7/7

30

NOVOZHILOV, N.M., kand.tekhn.nauk; SOKOLOVA, A.M., inzh.

Quality and composition of sulfide inclusions in the weld metal  
during arc welding. Svar. proizvod. no.3:12-16 Mr '63. (MIRA 16:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i  
mashinostroyeniya.

(Electric welding) (Steel--Inclusions)

NOVOZHILOV, N.M., kand. tekhn. nauk; SOKOLOVA, A.M., inzh.

Amount and composition of oxide inclusions in the joint  
metal during arc welding. Svar. proizv. no.8:16-19 Ag '63.  
(MIRA 17:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii  
i mashinostroyeniya.



SOLODOVA, A. N. , ed.

N/5  
615.901  
.55

Lit'ye povyshennoy tochnosti Casting with increased precision  
Moskva, Mashgiz, 1958.

196 p. illus., diags., graphs, tables (Nauchno-tekhnicheskoye  
Obshchestvo Mashinostroitel'noy Promyshlennosti. Leningradskoye  
Oblastnoye Pravleniye, Kniga, 45)  
Includes references.

1. A. ...  
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SOKOLOVA, A. N.

SOKOLOVA, A.N.

Effect of lowered temperatures on the development of chicks.  
Uch.zap.Len.un. no.165:248-255 '53. (MLRA 7:7)

1. Laboratoriya genetiki zhivotnykh kafedry genetiki i selektsii  
(zaveduyushchiy kafedroy professor N.V.Turbin)  
(Poultry) (Cold--Physiological effect)

SOKOLOVA, A.N.

Breeding poultry for high productivity and resistance to cold.  
Ptitsevodstvo 8 no.9:26-29 S '58. (MIRA 11:10)

1. Severo-Zapadnyy nauchno-issledovatel'skiy institut sel'skogo  
khozyaystva.

(Poultry breeding)

DINFISHTSEYN, L.V.; SOKOLOVA, A.P.; SHIRMAN, A.M.

Problem of late sequelae following a craniocerebral trauma  
in early childhood. Zhur. nevr. i psikh. 64 no.7:1058-1064 '64.  
(MIRA 17:12)

1. Otdel patomorfologii tsentral'noy nervnoy sistemy (zaveduyush-  
chiy- kand. med. nauk A.P. Sokolova, nauchnyy konsul'tant - prof.  
A.P. Avtsyn) Nauchno-issledovatel'skogo instituta psikhiiatrii  
(direktor - prof. D.D. Fedotov) Ministerstva zdravookhraneniya  
RSFSR, Moskva.

SOKOLOVA, A.P.

Reaction of Aloe extracts therapy of chronic pneumonia in children  
to monocytic reaction. Vopr. pediat. 20 no. 3:57-63 May-June 1952.

(CLML 22:4)

1. Of Gor'kiy Oblast Scientific-Research Institute (Director --  
A. A. Prokof'yev; Scientific Supervisor -- Prof. F. D. Agafonov).

NIKONOVA, Ye.A.; SOKOLOVA, A.P.; GURVICH, L.Z.

Determination of the average degree of polymerization of cellulose in the complex solution iron - tartaric acid - sodium hydroxide. Khim.volok. no.3:43-44 '62.

(MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut steklyanogo volokna.

(Cellulose)

(Polymerization)

SOKOLOVA, A.S.

Treatment of gynecological patients at Ayak-Kalkan Mineral  
Springs. Trudy Inst.kraev.pat.AN Kazakh. S.S.R. 11:109-117  
'62. (MIRA 16:4)

(GYNECOLOGY)  
(ALMA-ATA PROVINCE---BATHS, MEDICATED)



1. MATVEYEV, P. N.; SOKOLOVA, A. S.; MASYAGIN, A. V.; KUZNETSOV, V. P.
2. USSR (600)
4. Hulls (Naval Architecture)
7. Review of B. N. Smolyakov's "Increasing the strength of vessels." Reviewed by P. N. Matveyev, A. S. Sokolova, A. V. Masyagin, V. P. Kuznetsov. Rech. transp. 21 no. 6 1952.
9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

FILIN, Anatoliy Petrovich; ~~SOKOLOVA, Antonina Stepanovna~~; KALININ, V.S.,  
redaktor; VOLCHOK, K.M., tekhnicheskiiy redaktor

[Structural mechanics in shipbuilding] Stroitel'naya mekhanika  
korablia. Leningrad, Izd-vo "Rechnoi transport," Leningr. otd-  
nie. Pt.1. [Bending and strength of rods and rod systems]  
Izhib i ustoiчивost' sterzhnei i sterzhnevyykh sistem. 1957 .  
443 p. (MIRA 10:11)

(Structures, Theory of) (Naval architecture)

BELKIN, V.P., doktor tekhn.nauk, prof.; BEL'GOVA, M.A., kand.tekhn.nauk;  
KOVALEVSKIY, G.V., kand.tekhn.nauk; MASYAGIN, A.V., kand.tekhn.nauk;  
MEBYLOV, V.M., kand.tekhn.nauk; RYABOV, L.I., kand.tekhn.nauk;  
SIVERS, N.L., kand.tekhn.nauk; SOKOLOVA, A.S., kand.tekhn.nauk;  
TAUBIN, G.O., kand.tekhn.nauk; KONTOROVICH, B.M., inzh.

"Designing ships' hulls" by A.A. Pravdin. Reviewed by V.P. Belkin  
and others. Sudostroenie 24 no.8:78-79 Ag '58. (MIRA 11:10)  
(Hulls(Naval architecture))

SOKOLOVA, A.S.

Characteristics of obstetrical and gynecological pathology in  
patients with latent brucellosis. Trudy Inst.kraev.pat.AN  
Kazakh SSR 12:214-219 '62. (MIRA 15:11)  
(GENERATIVE ORGANS, FEMALE—DISEASES)(BRUCELLOSIS)

SOKOLOVA, A. S., Cand Med Sci — (diss) "Therapeutic <sup>properties</sup> ~~qualities~~ of  
the mud <sup>the</sup> ~~of~~ Teresken Lake and treatment of gynecologic patients at  
the Yany-Kurgan health resort." Alma-Ata, 1957. 13 pp (Inst of  
Physiology, Inst of <sup>Regional</sup> ~~Regional~~ Pathology, Inst of Clinical and Ex-  
perimental Surgery, Acad Sci Kazakh SSR), 120 copies (KL, 15-58,  
119)

-85-

SOKOLOVA, A.S.

Treating gynecological patients at the Yany-Kurgan mud bath health resort. Vest. AN Kazakh, SSR 13 no.6:86-89 Je '57. (MIRA 10:9)  
(YANY-KURGAN--BATHS, MOOR AND MUD)  
(GENERATIVE ORGANS, FEMALE--DISEASES)

SOKOLOVA, A.S.

Permeability of rabbit vaginal mucosa by phosphorus salts and calcium [with summary in English]. Akush. i gin. 33 no.2:72-74  
Mr-Apr '57. (MLRA 10:6)

1. Iz Instituta krayevoy patologii (dir. B.A.Atkhabarov, nauchnyy  
rukovoditel' - prof. Ya.S.Klenitskiy) Akademii nauk Kazakhskoy SSR.

(VAGINA, physiol.

permeability of mucosa for phosphates & for calcium)

(PHOSPHATES, metab.

permeability through vaginal mucosa in rabbits)

(CALCIUM, metab.

same)

SOKOLOVA, A.S.

Presence of estrogenic substances in mud from Lake Teresken at the resort of Yany-Kurgan. Vop.kur.fizioter. i lech.fiz.kul't. 23  
no.2:169 Mr-Ap '58. (MIRA 11:6)

1. Iz Instituta krayevoy patologii Akademii nauk Kazakhskoy SSR  
(dir. B.A.Atchabarov, rukovoditel' - prof. Ya.S.Klenitskiy)  
(TERESKEN, LAKE--ESTROGENS)



SOKOLOVA, A.S.

Changes in the vaginal microflora of gynecological patients treated  
with mud baths at the Yany-Kurgan health resort. Trudy Inst. kraev.  
pat. AN Kazakh. SSR 7:110-114 '59. (MIRA 13:3)  
(YANY-KURGAN--BATHS, MOOR AND MUD) (VAGINA--BACTERIOLOGY)

SOKOLOVA, A.S.

Changes in the interoception of the genitalia in gynecological patients  
treated with mud baths at the Yany-Kurgan health resort. Trudy Inst.  
kraev.pat. AN Kazakh. SSR 7:115-120 '59. (MIRA 13:3)  
(YANY-KURGAN--BATHS, MOOR AND MUD)  
(GENERATIVE ORGANS, FEMALE--INNERVATION)

ZAMYATIN, Sergey Ivanovich; SOKOLOVA, Anfisa Sergeyevna; ZAPLAVNOV, O.V.,  
red.; ROROKINA, Z.P., tekhn. red.

[Health resort of Yany-Kurgan] Kurort IAny-Kurgan. Alma-Ata, Izd-  
vo Akad. nauk Kazakhskoi SSR, 1961. 36 p. (MIRA 14:10)  
(YANY-KURGAN—HEALTH RESORTS, WATERING PLACES, ETC.)

SOKOLOVA, A.S.

Treatment of gynecological patients at the Almaarasan Health  
Resort. Izv. AN Kazakh. SSR. Ser. med. nauk no.1:58-65 '63.  
(MIRA 16:10)

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BOGOLUBOVA, V. .

Comparative characteristics of the results of treating gynecological diseases at the Ayek-Falkan and Almaty balneological health resorts. Izv. VNI Kazakh. Vuz. Ser. med. nauk no. 1280-33 '52. (MIRA 1787)

SOKOLOVA, A.S., kand. tekhn. nauk

Elastic, thin-walled bars with deformable contours. Trudy LIT  
no.50:3-10 '63. (MIRA 17:11)

SOKOLOVA, A.V., kandidat meditsinskikh nauk, redaktor; MOGILETSKIY, B.,  
tekhnicheskii redaktor

[Odessa health resorts; a reference manual] Kurorty Odessy; spravochnik. [Odessa] Odesskoe obl. izd-vo, 1955. 141 p. (MLRA 9:10)  
(ODESSA--HEALTH RESORTS, WATERING PLACES, ETC.)

TAZIEFF, Haroun; SOKOLOVA, A.V. [translator]

[Craters on fire] Kratery v ognе. Moskva, Gos.izd-vo geogr.  
lit-ry, 1958. 174 p. Translated from the French. (MIRA 12:12)  
(Volcanoes)



NEPENINA, Yu.N.; SOKOLOVA, A.V.; POPOVA, Ye.E.

Obtaining sulfate cellulose and hemicellulose from tar-  
impregnated stump wood. Trudy LTA no.87:79-90 '59. (MIRA 13:4)  
(Cellulose)

SOKOLOVA, A. V. (Moskva)<sup>1</sup>

Study of alcohols in a course of organic chemistry. Khim. v  
shkole 17 no.6:47-48 N-D '62. (MIRA 16:1)

(Alcohols) (Chemistry, Organic—Study and teaching)

SOKOLOVA, A.V.

Practical experience in the spectroscopic laboratory of a steel  
wire mill. Izv.AN SSSR.Ser.fiz.19 no.2:173-174 Mr-Apr '55.  
(Tartu--Spectrum analysis--Congresses) (MLRA 9:1)

СКОЛОВА, А. В.

Biology-Study and Teaching

Forming the pupils' basic concepts of Michurin biology. A. V. Sokolova. Est. v shkole  
No. 3, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1952, Uncl.



SOKOLOVA, A.V., uchitel'nitsa.

Some observations on teaching the subject "the mammalian class." Est.v shkole  
no.6:57-60 '53. (MLRA 6:10)

1. Shkola no. 193 g. Moskvyy.

(Zoology--Study and teaching)

SOKOLOVA, A.V.

Zoological charts ("Series of charts 'Structure of animal bodies.' "  
A.A.Iakhontov. Reviewed by A.V.Sokolova). Est. v shkole no.6:88-89  
N-D '54. (MIRA 7:12)

1. Uchitel'nitsa shkoly No. 193 g. Moskvyy.  
(Iakhontov, Aleksandr Aleksandrovich, 1879- )  
(Anatomy, Comparative)

SOKOLOVA, A.V., *zasluzhennaya uchitel'nitsa shkoly RSFSR.*

Methods and methodical practices in developing botanical concepts.  
Biol. v shkole no.1:22-27 Ja-F '58. (MIRA 11:1)

1. Shkola No.193 g. Moskvyy.  
(Botany--Study and teaching)



SOKOLOVA, A.V., zasluzhennaya uchitel'nitsa shkoly RSFSR

Author's address

Agricultural work of eighth-grade students of urban schools. Biol.  
v shkole no.3:28-33 My-Je '60. (MIRA 13:7)

1. Shkola No. 193, goroda Moskvyy.  
(Agriculture---Study and teaching)

SOKOLOVA, A.V., zasluzhennaya uchitel'nitsa shkoly

Preparing students of primary grades for the study of  
biology. Biol.v shkole no.4:7-9 J1-Ag '60.  
(MIRA 13:7)

1. Srednaya shkola RSFSR No 192 goroda Moskvyy. Delegat  
Vserossiyskogo s"yezda uchiteley.  
(Biology--Study and teaching)

SOKOLOVA, A.V., ~~zasluzhennaya~~ uchitel'nitsa shkoly RSFSR; USOL'TSEVA, A.S.,  
uchitel'nitsa (Moskva)

Organizing evening meetings and exhibitions on scientific and  
atheistic tops. Biol. v shkole no.2:35-38 Mr-Apr '61. (MIRA 14:3)  
(Atheism--Study and teaching)  
(Science--Study and teaching)

SOKOLOVA, A.V., zasluzhennaya uchitel'nitsa shkoly RSFSR (Moskva)

Atheistic training during biology lessons in eight-year schools. Biol. v shkole no.6:16-21 N-D '61.

(MIRA 14:11)

(Biology--Study and teaching)

(Atheism--Study and teaching)

SOKOLOVA, A.V.: zasluzhennaya uchitel'nitsa shkoly RSFSR (Moskva)

"Methods of teaching human anatomy and physiology" by  
I.V. Kozyr', P.I. Suyorova, A.M. TSuzmer. Reviewed by  
A.V. Sokolova. Biol. v shkole no.5:85-87 S-0 '62.  
(MIRA 16:2)

(Anatomy, Human—Study and teaching)

(Physiology—Study and teaching)

(Kozyr', I.V.) (Suyorova, P.I.) (TSuzmer, A.M.)

SOKOLOVA, A.V.; BEKLEMISHEVA, M.V.

Man and plants; a Pioneer meeting. Biol. v shkole no.3:68-69  
My-Je '63. (MIRA 16:10)

1. Shkola No. 600, Moskva.

SOLOVA, N.I.; SOLOVA, A.V., fitopatolog

Antropomorphose of cotton and quarantine measures for its control.  
Zashch. rast. ot vred. i bol. 9 no.11:45-46 '64.

(MIRA 18:2)

1. Sveduyushchaya otdelom fitopatologii Tsentral'noy karantinnoy laboratorii Ministerstva sel'skogo khozyaystva SSSR (for N.Sokolova).
2. Tsentral'naya karantin'naya laboratoriya Ministerstva sel'skogo khozyaystva SSSR (for Sokolova).

BLYAKH, G.I.; GORELKINSKIY, Yu.V.; GRINMAN, I.G.; SOKOLOVA, A.Ya.;  
SHULYAR, B.N.

Automatic titrimeter. Zav.lab. 26 no.12:1426-1429 '60.'  
(MIRA 13:12)

1. Institut yadernoy fiziki AN KazSSR.  
(Titrimeters)



PIGULEVSKIY, G.V.; SOKOLOVA, A.Ye.

Reactions of oxides of higher unsaturated acids with lithium aluminum hydride. Part 1: Oxides of oleic and petroselinic acids. Zhur. ob. khim. 31 no.2:652-656 F '61. (MIRA 14:2)

1. Leningradskiy gosudarstvennyy universitet.  
    (Oleic acid)                      (Petroselinic acid)  
    (Aluminum lithium hydride)

FIGUREVSKII, G.V.; SUCLOVA, A.Ye.

Reactions of oxides of higher unsaturated acids with lithium  
aluminum hydride. Part 2: Oxide of methyl erucate. Zhur. ob.  
Khim. 31 no. 2:654-658 P 1961. (MIRA 14:2)

1. Leningradskiy gosud. stvennyy universitet.  
(Article acid)

FIGULEVSKIY, G.V.; SOKOLOVA, A.Ye.

Catalytic hydrogenation of petroselinic Hydroxy acids. Zhur.prikl.khim.  
36 no.2:455-456 F '63. (MIRA 16:3)

1. Leningradskiy gosudarstvennyy universitet.  
(Petroselinic acid)

PIGULEVSKIY, G.V.; SOKOLOVA, A.Ye.

Reduction of oleic acid oxide and oleyl alcohol oxide by lithium aluminum hydride. Zhur. ob.khim. 34 no. 6:1647. 1651 My '64.

Reduction of petroselinyl and erucyl alcohols by lithium aluminum hydride. Ibid.:1651-1655 (MIRA 17:7)

1. Leningradskiy gosudarstvennyy universitet.

BOKOLOVA, E. V. Cand Med Sci -- (diss) "On clinical peculiarities of depressive-paranoid schizophrenia." Mos, 1955. 14 pp (Min of Health ~~REDACTED~~ USSR.  
Central Inst for the Advanced Training of Physicians), 200 copies (KL, 30-58, 116)

-59-

SOKOLOVA, B.V. (Moakva)

Complications in antabuse treatment. Trudy Gos. nauch.-issl.  
inst. psikh. 38:344-354 '63 (MIRA 16:11)

\*

KAKOVSKIY, I.A., GOLOVIN, A.A., KARASEV, K.A., SOKOLOVA, D.D.

Methods of treating oxidized gold ores containing selenium. Obog.  
rud 2 no. 6:31-34 '57. (MIRA 11:8)

(Gold ores)  
(Ore dressing)  
(Selenium)

5(4)

AUTHORS:

Sokolova, D. F., Morozov, N. M.,  
Temkin, M. I.

SOV/76-33-2-37/45

TITLE:

Kinetics of Ammonia Synthesis at Low Pressure and Under  
Conditions of Diffusion Retardation (Kinetika sinteza ammiaka  
pri nizkikh davleniyakh v usloviyakh diffuzionnogo tormozheniya)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 2, pp 471-479  
(USSR)

ABSTRACT:

The question of the influence of diffusion phenomena on the rate of synthesis of ammonia was investigated for the first time by V. A. Royter (Ref 1), and the most recent experiments on this question (Refs 2-7) have showed that the diffusion retardation must absolutely be considered. Investigations on the role of the diffusion factors in the ammonia synthesis were carried out by V. N. Shishkova, I. P. Sidorov and M. I. Temkin (Ref 9) at pressures of 100-300 atm using industrial catalysts and the flowing-through-circulation method. The present paper shows that the character of the diffusion process in this latter type of investigation is different at atmospheric or lower pressures than at high pressures. As opposed to the

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Kinetics of Ammonia Synthesis at Low Pressure and  
Under Conditions of Diffusion Retardation

SOV/76-33-2-37/45

method in reference 8 the flowing-through-circulation system has two circulation cycles (Fig 1). The reaction rate was determined from an amount of ammonia frozen out of a supplementary cycle. The catalyst used was a melted magnetite which had been treated with a nitrogen-hydrogen mixture and which had  $\text{Al}_2\text{O}_3$  and  $\text{K}_2\text{O}$  added to it. The experiments were carried out by using a nitrogen-hydrogen mixture (in stoichiometric ratio) at 350-500° and with pressures of 1.0, 0.5 and 0.25 atm at various rates of diffusion (Table 1). The reaction kinetics were investigated in the diffusion area on a uniformly spherical catalyst (diameter = 1.2 cm) at 50-500° C and the above mentioned pressures with a rate of gas diffusion of 3000 - 15000 hour<sup>-1</sup>. The experiments indicate two limiting cases for the course of the reaction: in terms of kinetics (small-grained catalyst) the yield of the catalyst is proportional to its volume and in terms of the inner diffusion (coarse-grained catalyst) the yield is proportional to the outer surface of the catalyst particle. A comparison of the results obtained with the small-grained catalyst (Table 3)

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Kinetics of Ammonia Synthesis at Low Pressure and  
Under Conditions of Diffusion Retardation

SOV/76-33-2-37/45

with those obtained with the coarse-grained catalysts yield the value of  $D^* = 1 \cdot 10^{-2} \text{ cm}^2/\text{sec}$  for the effective diffusion coefficient of ammonia in the catalyst pores, according to equation (14) and at 1 atm pressure. This value apparently corresponds to the transformation range between the Knudsen and the usual diffusion, and defines the limit of kinetic diffusion. Using  $D^*$  the maximum diameter of the catalyst which will still allow the synthesis to proceed without retardation can be calculated:

$$a_{\text{limit}} = \sqrt{D^* \tau} \quad (\tau = \text{time of contact})$$

There are 2 figures, 3 tables, and 13 references, 10 of which are Soviet.

ASSOCIATION: Akademiya nauk SSR, Fiziko-khimicheskiy institut im.  
L. Ya. Karpova, Moskva (Academy of Sciences, USSR Physical-  
Chemical Institute imeni L. Ya. Karpov, Moscow)

SUBMITTED: August 7, 1957  
Card 3/3

S/191/62/000/003/003/010  
B101/B147

AUTHORS: Sokolova, D. E., Tarakanov, O. G.

TITLE: Gelatinization of polyvinyl chloride pastes

PERIODICAL: Plasticheskiye massy, no. 3, 1962, 5-7

TEXT: In connection with the problem of production of foamed plastics, the authors studied the gelatinization of the polyvinyl chloride (PVC) resins Igelit F and P (Eastern Germany), Vestolit P (Federal Republic of Germany), and the Soviet type M(M), as well as of vinyl chloride (VC) copolymers with (10-15%) acrylonitrile (I); methacrylic acid (II); methacrylate (III); or vinyl acetate (IV). These copolymers were synthesized by emulsification in aqueous phase at 12 atm, 60°C, for 10 hrs. The total monomer-to-H<sub>2</sub>O ratio was 1:3, ammonium persulfate served as initiator (0.5% by weight of the monomers); MK (MK) emulsifier (0.5% by weight of the aqueous phase) was used since gelatin yielded poorly soluble copolymers. VC copolymers with I and II were unsoluble in dioctyl phthalate (DOP). A 10% paste of the other resins in DOP was heated, the viscosity,  $\eta$ , versus temperature was plotted, and maximum viscosity was

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Gelatinization of polyvinyl ...

S/191/62/000/003/003/010  
E101/E147

determined as gelatinization temperature. The temperature at which transparency occurred was also measured. For commercial resins, the gelatinization temperature was 112-129°C, for the copolymer with III 81°C, for the copolymer with IV 60°C. Also in tricresyl phosphate, the gelatinization temperature of the VC + IV copolymer was about 50°C below that of pure PVC. The gelatinization temperature of commercial PVC showed a direct dependence on the molecular weight: it increased with increasing viscosity of the 1% solution in dichloro ethane. On Igelit F reprecipitated from dichloro ethane by methanol and dried at different temperatures, and increase in gelatinization temperature (by 28°C) was observed at elevated drying temperature. The decrease in gelatinization temperature of Igelit dried at 170°C is explained by structural changes. There are 2 figures, 4 tables, and 7 references: 3 Soviet-bloc and 4 non-Soviet-bloc. The reference to the English-language publication reads as follows: Aimi Misanori, Japan Plast., 2, no. 4, 14 (1958).

Card 2/2

SOKOLOVA, E.A.

Ways of lowering production costs. Gidroliz. i leschnim.  
prom. 16 no.4:21-22 '63. (MIRA 16:7)

1. Saratovskiy gidroliznyy zavod.  
(Costs, Industrial) (Hydrolysis)

L 19018-63      BDS/EWT(1)/FGC(w)      AFFTC/ASD/IJP(C)  
ACCESSION NR: AP3007523      S/0181/63/005/009/2717/2719

AUTHOR: Bonch-Bruyevich, V. L.; Sokolova, E. B.      55  
54

TITLE: On one possible recombination mechanism

SOURCE: Fizika tverdogo tela, v. 5, no. 9, 1963, 2717-2719

TOPIC TAGS: recombination mechanism, exciton capture, localized exciton state, semiconductor theory, negatively charged capture center, electron capture mechanism

ABSTRACT: The results of experiments performed in the last few years on recombination at multicharged centers showed that the cross sections of electron capture by negatively charged centers are unexpectedly large. This led to the conclusion that it is not the electron that is captured but a neutral product, an exciton.<sup>1</sup> In the first stage of such a capture, an electron and a hole produce an exciton. If there is an impurity, the second stage consists in the capture of the exciton and its transition to a localized state associated with the impurity. The concept of such localized states was introduced by various authors, and they were observed experimentally.

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L 19018-63

ACCESSION NR: APJ007523

A simple analytical expression is derived to deduce the behavior modes of localized excitons which might be verified experimentally. It was found that a nonmonotonous temperature dependence, for which there is no physical basis, must be ascribed both to the probability of exciton decay and to the probability of exciton release from the trap per unit time. Furthermore, the dependence of the lifetime on the concentration of basic carriers, resulting from the formula, does not agree with experimental results. Thus, the theoretical formulation of a recombination mechanism based on intermediate excitons does not satisfy the experiments. In principle, however, such a mechanism is not impossible and should be taken into consideration during interpretation of experiments. Orig. art. has: 2 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 28Apr63

DATE ACQ: 14Oct63

ENCL: 00

SUB CODE: PH

NO REF SOV: 011

OTHER: 003

Card 2/2

L 38534-65 EWA(h)/EWA(c)/EWT(1)/EWT(m)/EWP(b)/T/EWP(t) Pz-6/Peb IJP(c) AT/  
 ACCESSION NR: AP5005289 JD S/0181/65/007/002/0489/0495

AUTHOR: Sokolova, E. B.

TITLE: Concerning the optical properties of dislocations in semiconductors

SOURCE: Fizika tverdogo tela, v. 7, no. 2, 1965, 489-495

TOPIC TAGS: germanium, optical property, dislocation, semiconductor, radiative recombination, absorption line, emission line

ABSTRACT: In view of the lack of a theory explaining the recombination radiation connected with the presence of dislocations in germanium, the authors consider the optical properties of linear dislocations in semiconductors such as germanium on the basis of a well-known simple model, wherein the dislocations with the acceptor levels captured on it by the electrons constitute a negatively charged line surrounded by a region of positive space charge. The coefficient of absorption and the quantities characterizing the radiative recombination on the dislocations is calculated for such a model. The absorption coefficient is determined from the attenuation of the radiation intensity with increasing depth in the specimen, and is calculated by the two-dimensional Green's function procedure. The emission and

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L 38534-65

ACCESSION NR: AP5005289

2

absorption line shapes are discussed. Estimates of the absolute quantities show that the absorption and emission by the dislocations under the prevailing dislocation densities in germanium are quite low, the maximum radiation per cubic centimeter amounting to approximately  $10^5$  quanta per second. "I thank V. L. Bonch-Bruyevich for guidance of the work." Orig. art. has: 3 figures and 24 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 28Jul64

ENCL: 00

SUB CODE: SS, OP

NR REF SOV: 005

OTHER: 002

Card 2/2 n#

10000-67 (1) GW (A, N) SOURCE CODE: UR/0413/66/000/015/0062/0062  
ACC NR AP6029899

INVENTORS: Alekseyov, A. M.; Bezruk, I. A.; Bulanov, N. A.; Shchukin, S. N.; Klyuchkin, V. N.; Kulikov, A. V.; Melikadze, S. Ye.; Chinareva, O. M.; Yemel'yanov, A. M.; Mangirova, G. S.; Rozin, G. I. M.; Boltalin, A. P.; Zlatkovich, L. A.; Iova, G. M.; Sokolova, E. D.

ORG: none

TITLE: Geoelectric prospecting device. Class 21, No. 184361 [announced by All-Union Scientific Research Institute of Geophysical Prospecting Methods (Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki)]

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 62

TOPIC TAGS: prospecting, geologic instrument

ABSTRACT: This Author Certificate presents a geoelectric prospecting device containing a dc generator, a master oscillator, a thyatron bridge commutator, a reference phase synchropulse shaper unit, a radio station, and a measuring laboratory. The laboratory contains an electromagnetic field receiver, a calibration unit, a selective amplifier, a radio station, a synchropulse shaper unit, an electronic oscillograph, a recorder, a time setting unit, and a detector voltmeter. For generalized utilization of the device in the VP, MPP, and INFAZ methods, to increase the accuracy of measuring the phase angles in the infrasonic frequency range, and to increase the noise

UDC: 550.837

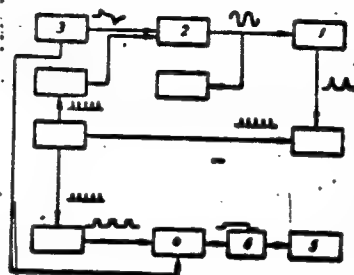
Card 1/2

L 10306-57

ACC NR: AP6029899

protection when measuring pulsed signals, a phase marker in the form of a diode regenerative comparator is placed in the measuring laboratory. The comparator is connected to the output of the selective amplifier. An input signal divider connected to the input of the selective amplifier is used in the calibration unit. A dc amplifier operating in the electrometric mode is connected between the register and recorder (see Fig. 1).

Fig. 1. 1 - phase marker; 2 - selective amplifier; 3 - calibration unit; 4 - register; 5 - recorder; 6 - dc amplifier



Orig. art. has: 1 diagram.

SUB CODE: 09 08/ SUBM DATE: 30Jun64

Card 2/2

YEREMEEV, I.V.; DOKOLOVA, E.F.

Electrocardiographic changes in serious forms of epidemic hepatitis and toxic dystrophy of the liver. Trudy LPMI 30: 177-186 '63. (MLP: 18:3)

1. Bol'nitsa imeni Botkina v Leningrade (glavnyy vrach M.M. Figurina, nauchnyy rukovoditel' prof. Ye.S.Gurevich).

SOKOLOVA, E.I.

✓ The treatment of epilepsy in children and youths with dilantin. E. I. Sokolova (Med. Inst., Izhevsk). *Zhur. Nevropatol. i Psichiatr. im. Korsakova* 53, 385-8 (1953).—Of 15 boys and 15 girls of 7-18 yrs. of age under treatment and observation, epileptic seizures in 7 had developed as a result of brain injuries, in 17 as a result of central nervous diseases, and 11 were diagnosed as genuine epilepsy of unknown etiology. In the majority of the patients seizures occurred 1-2 times/week and in some, seizures occurred daily. Treatment with luminal and with Br gave negative results. As treatment with dilantin progressed, the doses and the frequency of their administration were gradually reduced at a rate indicated by the reduction in the gravity and number of seizures. Dilantin, 0.1 g., was the highest dose, and 4 times/day the highest frequency of the drug administration. Six of the patients became seizure-free; in 18 there was a sharp drop in the frequency of seizures occurrence; 6 showed no improvement and the condition of 1 became worse. Few side-effects of the drug were noted.

B. S. Levine

SOKOLOVA, E.I.

**Synthesis of iron(III) and iron(II) silicates.** E. I. Sokolova, L. P. Listova, and A. Z. Valnshtein. *Doklady Akad. Nauk S.S.S.R.* 96, 1223-8 (1954). For the investigation of the low-temp. genesis of goethite, hydrogoethite, and of the chlorite-group minerals the following systems are studied:  $\text{NaOH-Na}_2\text{SiO}_3\text{-Fe}_2(\text{SO}_4)_3\text{-H}_2\text{O}$ ;  $\text{MgSO}_4\text{-Fe}_2(\text{SO}_4)_3\text{-NaOH-Na}_2\text{SiO}_3\text{-H}_2\text{O}$ ;  $\text{NaOH-Na}_2\text{SiO}_3\text{-FeCl}_3\text{-H}_2\text{O}$ ;  $\text{NaOH-Na}_2\text{SiO}_3\text{-MgCl}_2\text{-FeCl}_3\text{-H}_2\text{O}$ ; further  $\text{Na}_2\text{SiO}_3\text{-FeSO}_4\text{-H}_2\text{O}$ ;  $\text{Na}_2\text{SiO}_3\text{-MgSO}_4\text{-FeSO}_4\text{-H}_2\text{O}$ ;  $\text{Na}_2\text{SiO}_3\text{-MgSO}_4\text{-FeSO}_4\text{-Al}_2(\text{SO}_4)_3\text{-H}_2\text{O}$ . The exptl. temp. was const.  $\approx 20^\circ$ , pH varied between 2 and 8,  $E_H$  from +700 to +330 mv., the ratio  $\text{Fe}_2\text{O}_3\text{:SiO}_2$  from 1:1 to 1:2, and variable concns. of  $\text{FeO}$ ,  $\text{SiO}_2$ ,  $\text{MgO}$ , and  $\text{Al}_2\text{O}_3$ . The duration of the exposures extended to 1 yr. and even more. The end products were identified by microscopic and x-ray methods, and assumed to be equil. products. The lower the concn. in  $\text{SiO}_2$  and  $\text{MgO}$  in the soln. the longer the periods were necessary for the sedimentation of  $\text{SiO}_2$  hydrogels from  $\text{Na}_2\text{SiO}_3$  solns. and of  $\text{Mg}(\text{OH})_2$  from  $\text{MgCl}_2$  solns., the first for pH = 2.80-0.30, and the latter for pH = 8.0-10.5. The great dependence of the mineral pptn. from the concn. of the solns. is evident, not only that from pH and  $E_H$ . Also the character of the anions present in the solns. is important enough, e.g. for the pptn. from sulfate or chloride solns. (especially goethite and hydrogoethite). The amt. of  $\text{SiO}_2$  pptd. from a  $\text{Na}_2\text{SiO}_3$  soln., by far greater than that pptd. from a  $\text{Fe}_2\text{O}_3$  +  $\text{SiO}_2$  hydrogels.  $\text{Mg}^{++}$  in ferrisilicate systems and in the presence of other cations in the soln. behaves differently from pure  $\text{Mg}^{++}$  salt solns.

Al-contg. products are observed. pH affect the pptn. of the mineral pts. are observed: (1) pptn. of high crystallinity for pH = 2.0 to 4.5, low in  $\text{SiO}_2$  and high in  $\text{Fe}_2\text{O}_3$  (17%); all have a good crystallinity,  $n$  varying from 1.883 to 1.905 (goethite and hydrogoethite); (2) cryptocryst. silicates are observed if pH is neutral or weakly alk.;  $n$  of the products varies between 1.696 and 1.725. From iron(III) chloride systems only for pH = 5.7 to 5.5 pptns. are observed, with  $n = 1.750$ ,  $\text{Fe}_2\text{O}_3 = 63$  to 70%;  $\text{SiO}_2$  from 18 to 23%, free  $\text{Fe}_2\text{O}_3$  25 to 30%,  $\text{H}_2\text{O} = 12\%$ . Without  $\text{Mg}^{++}$ , a ferrisilicate of the approx. compn.  $3\text{Fe}_2\text{O}_3 \cdot 2\text{SiO}_2 \cdot 5.5\text{H}_2\text{O}$  results, but of x-ray amorphous character. With  $\text{Mg}^{++}$  the products are well crystd. The dark-green chlorite-like color of the ferrosilicates at pH = 5.45 to 6.5 is very characteristic; these products are easily oxidized by the air, but well crystd. The x-ray diagrams are not much different from true chlorites, especially in the lines 6.90; 7.2; 4.64 Å., although the intensities are different. The chem. analyses of the products show variable ratios of  $\text{RO/SiO}_2$  and  $\text{R}_2\text{O}_3/\text{SiO}_2$ , with tetrahedral Si varying from 4.0 to 3.16, i.e. the same ratios which have been discussed by Serdyuchenko for natural chlorites (C.A. 43, 521d). The Al-contg. products are nearly all x-ray amorphous and different from natural chlorites.

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W. Eitel

Sokolova, E. I.

Sokolova, E. I., Litsya, L. B., and Valnshtein, A. Z.:  
Ferrosilikatnye i ferrosilikatnye sulfatnye i kloridnye  
sistemy ravновесiya (Ferrie Silicate and Ferrous Silicate  
Sulfate and Chloride Equilibrium Systems). Moscow:  
Izdatel. Akad. Nauk S.S.S.R. 1956. 66 pp. r. 4. k. 30.

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137-58-5-9370 D

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 80 (USSR)

AUTHOR: Sokolova, E. I.

TITLE: Certain Theoretical Aspects of Hydrometallurgical Extraction of Lead From Ores That Are Difficult to Concentrate (Nekotoryye voprosy teorii gidrometallurgicheskogo izvlecheniya svintsa iz trudnoobogatimyykh rud)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the In-t metallurgii AN SSSR (Institute of Metallurgy, Academy of Sciences, USSR), Moscow, 1957.

ASSOCIATION: In-t metallurgii AN SSSR (Institute of Metallurgy, Academy of Sciences, USSR), Moscow.

1. Lead ores--Processing

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E. I. SOKOLOV

Distr: 4E4j

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Phase diagram for the system  $\text{PbO}-\text{Na}_2\text{O}-\text{H}_2\text{O}$ . E. I. Sokolova and D. M. Chizhikov. *Zhur. Neorg. Khim.* 2, 1662-4 (1957).—The water corner of the system was studied at 18, 60, and 95°. For the left branch of the soly. isotherm at all temps., the residue is  $\text{PbO}$ . For the right branch the residues are  $\text{PbO} \cdot 2\text{Na}_2\text{O} \cdot 17\text{H}_2\text{O}$  at 18°;  $\text{PbO} \cdot \text{Na}_2\text{O} \cdot 10\text{H}_2\text{O}$  at 60°; and  $2\text{PbO} \cdot \text{Na}_2\text{O} \cdot 7\text{H}_2\text{O}$  at 95°. An increase in the alk. concn. does not bring about a significant increase in the soly. of  $\text{PbO}$ . Its soly. in alkali can be increased significantly by increasing the temp. J. Roytar Leach

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*[Signature]*

S/509/60/000/004/006/024  
E021/E106

AUTHOR: Sokolova, E.I.

TITLE: Extraction of Lead from Minerals by Caustic Soda  
Solutions

PERIODICAL: Akademiya nauk SSSR. Institut metallurgii.  
Trudy, No.4, 1960. Metallurgiya, metallovedeniye,  
fiziko-khimicheskiye metody issledovaniya, pp. 89-93

TEXT: The aim of the investigation was to find the optimum conditions for extracting lead from difficult ores using caustic soda. The minerals cerussite (71.88 Pb), beudantite (22.5% PbO) and mimetesite (66.9% PbO) were used. The experiments were carried out in flasks placed in a thermostat. The solutions obtained were analysed for lead and sodium carbonate. The results showed that the greatest rate of solution of cerussite in the range 42-225 g/litre sodium hydroxide was with a solution containing 136 g/litre. With increase in concentration above this value, the extraction of lead decreased, because the solubility of soda decreased. The extraction of lead from mimetesite was an optimum with 154 g/litre sodium hydroxide. Increasing the  
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E021/E106

Extraction of Lead from Minerals by Caustic Soda Solutions

concentration from 154 to 300 g/litre resulted in a decrease in extraction. The extraction of lead from beudantite increased with increase in concentration from 68 to 300 g/litre sodium hydroxide. The relatively small quantity of lead extracted even with 300 g/litre (26.1%) was explained by the complexity and strength of the crystal lattice of the mineral. Studies of the effects of the time taken to extract the lead showed that the rate of solution of cerussite decreased with time. The quantity of lead extracted increased up to 60 minutes. For longer times there was practically no increase in the lead extracted. Studies of the effect of temperature showed that increasing the temperature of reaction from 60 to 90 °C increased the extraction of lead from cerussite. Increasing the liquid:solid ratio from 4:1 to 20:1 had very little effect on the amount of lead extracted. The extraction of lead from beudantite with 300 g/litre caustic soda at 90 °C with a liquid:solid ratio of 10:1 was 26.1% after 50 minutes. With 158 g/litre caustic soda,


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E021/E106

Extraction of Lead from Minerals by Caustic Soda Solutions

90-100 °C, and a liquid:solid ratio of 10:1, 59.2% lead was extracted from mimetosite after 60 minutes. With 136 g/litre caustic soda, 90 °C and a liquid:solid ratio of 20:1, 94.4% lead was extracted from cerussite in 30 minutes.

There are 1 figure, 6 tables and 4 Soviet references.



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